

SRRTTF – TSCA Workgroup Sponsored Stakeholder Workshop Inadvertently Produced PCBs in Pigments – Sustainable Solutions

In November of 2016, the EPA published revised Water Quality Standards for Washington State¹ that reduced the state standard for total PCBs from 170 parts per quadrillion (ppq) to 7 ppq. Contradictory to this more stringent standard, the U.S. Environmental Protection Agency (EPA) authorizes a nominal 50 parts per million (ppm) use allowance for inadvertently generated PCBs in products under federal Toxics Substance Control Act (TSCA) regulations. These inadvertently generated PCBs can be found in a wide array of consumer products including paints, printing inks, clothing dyes, newspaper, magazines and packaging. The TSCA allowance is seven billion times higher than the new WA state water quality standard.

The discrepancy between the TSCA allowance and the new water quality criteria becomes apparent when products such as clothing are washed, and newsprint and packaging materials are recycled, and inadvertently generated PCBs are discharged to the river as effluent from municipal wastewater treatment plants and recycling facilities. The inadvertent PCBs in the products are transferred to water discharges that are significantly higher than the water quality limits, despite treatment with best available water treatment technologies. There appears to be little regulatory or political will at the federal level to reduce this TSCA allowance. The TSCA Workgroup of the Spokane River Regional Toxics Task Force (SRRTTF) is exploring voluntary measures to reduce inadvertent PCBs in products in their efforts to keep PCBs from entering the Spokane River.

The TSCA Workgroup of the SRRTTF is hosting a multi-stakeholder workshop to address inadvertent PCBs in pigments and the downstream products that are manufactured using those pigments. This workshop focuses on products that are manufactured using pigment-containing PCBs (supply stream outlined in red in figure 1, p3). The goal of the workshop is to bring all interested parties together to brainstorm solutions to:

- Reduce the level of inadvertent PCBs in these products
- Identify performance challenges
- Address manufacturing concerns
- Determine voluntary measures to be implemented
- Develop next steps for implementation.

Stakeholders include representatives from across the entire supply chain:

- Pigment and ink manufacturers,
- Businesses and industries that utilize those inks and pigments
- Downstream suppliers of packaging, dyes and inks
- Industry organizations (eg., Color Pigments Manufacturers Association (CPMA), American Coatings Association (ACA), NAPIM, Sustainable Packaging Coalition (SPC), American Chemistry Council (ACC))
- Researchers developing new technologies
- Recyclers
- Government procurement experts and regulators.

¹ <https://www.gpo.gov/fdsys/pkg/FR-2016-11-28/pdf/2016-28424.pdf>

These stakeholders will gather to share information and discuss and develop potential solutions. Solutions may include identification of ink and dye alternatives, purchasing policies, identifying industry incentives to sustainable practices, and more.

The workshop is to be held in Spokane for the benefit of SRRTTF members and the primary focus will be on Washington State. Invitees are expected from around the nation. A planning committee will be formed to provide further definition to these preliminary concepts.

Workshop Content Suggestions:

Goal: Use or develop non-chlorinated pigments, inks and dyes that ultimately result in lower levels of PCBs in the environment

1. Define Goals, why are we here and what do we want to accomplish
2. What are inadvertent PCBs (how are they different from legacy PCBs)
3. Where do they come from? (Testing, how do we know what's in our products?)
4. Why do we care?
 - a. What are their hazard/toxicity properties
 - i. What is known and unknown
 - ii. What is the state of the science
 1. Presentation on preliminary results from EPA risk assessment, EPA National Workgroup focused on Inadvertent PCBs (per Hladick letter)
 - b. What are the regulatory challenges
 - i. Water Quality limits vs. TSCA limits
 - ii. Procurement specifications
 - iii. **Is this just a Washington (Spokane problem?)**
 - iv. Why does EPA not just lower the TSCA limit?
 - c. What are the other challenges?
 - i. Challenges to circular economy (IEP recycling)
 - ii. Supplier (pigments, inks, dyes, etc.) challenges
 - iii. End User (Packaging, Printers, clothing, Recyclers) challenges
5. What opportunities are there to intervene positively via the market
 - a. Innovation opportunities (new products?)
 - b. Procurement policies
 - i. Presentation from WA State Purchasing on PCB related procurement policies
6. Are there examples of best practices, (innovative products or policies) that can provide a model for alternatives that will support human and environmental health and safety, regulatory limits and a circular economy.
 - a. Case Studies and best practices
 - i. Road paint
 - ii. Apple/HP Case Study
7. What activities can we take to drive systemic change?
8. What about global companies?
9. Where do we go from here?

FIGURE 1
Supply Streams for Pigments Containing Inadvertent PCBs up to 50 ppm as uthorized under TSCA

